The unidirectional configuration may include a network element connected between the two stages (in the mid-stage); ~~by now,~~ such intermediate elements ~~have been used for~~ provide signal attenuation, dispersion compensation, or other features ~~etc~~.

A.M. 11/9/06

Also on page 2, please replace the paragraph beginning on line ~~22~~ 21 with the following amended paragraph:

It should be mentioned [[,]] that the conventional two-stage or multi stage unidirectional assembly, even when allowing independent control of parameters of the stages by the control circuit, is arranged in such a way that if a fiber cut occurs before the first stage amplifier, it behaves as a single integral device. That is [[i.e.]], all stages of the assembly are shut down by the assembly controller, since the whole assembly appears to be useless in the absence of the input optical signal. Such a ~~feature contradicts to inserting~~ shutdown would adversely affect the use of an OADM (Optical Add Drop Multiplexer) in the mid-stage of the above-described configuration. One should recall that an OADM is intended for receiving a WDM (wavelength division multiplexed) multi-channel optical signal, dropping at least part of the optical information channels in the signal, and/or adding information to at least one of the vacant optical channels in the signal for further transmitting a newly composed multi-channel multiplexed optical signal. Therefore, an OADM in the mid-stage ~~seems to be~~ can be rendered useless, since the complete shutdown of the two-stage configuration in the case of a fiber cut is harmful not only to the information received at the 1st stage, but also to the information added by the OADM.